THE MEDIATING ROLE OF EMPLOYEE SATISFACTION ON THE INFLUENCES OF EMPLOYEE DISCIPLINE AND EMPLOYEE MOTIVATION ON EMPLOYEE PERFORMANCE AT THE MINISTRY OF TRANSPORTATION, REPUBLIC OF INDONESIA, RESEARCH AND DEVELOPMENT DEPARTMENT

Fifi Hasanah¹, Singmin Johanes Lo²
¹) Master of Management in Mercu Buana University, Jakarta, Indonesia, grahamkur2@gmail.com
²) Lecturer of Economy and Business in Mercu Buana University, Jakarta, Indonesia, singmin.johanes@mercubuana.ac.id

Corresponding Author: First Author

Abstract: This research aimed to discover and explain the role of employee satisfaction on the influences of work discipline and employee motivation on employee performance at The Research and Development Department of Ministry of Transportation, Republic of Indonesia. The research method used a quantitative approach. The population was 160 employees of that department. The sample taken by Slovin’s formula with 5% error tolerance was 115 respondents. The data collection technique was administered through questionnaires by convenience method. Data were analyzed by using SEM SmartPLS version 3.2.8 for Windows. The results showed that: work discipline had significant and positive influence on both employee performance and employee satisfaction; employee employee motivation had significant and positive influence on both employee performance and employee satisfaction. However, the path analysis results showed that the indirect influences of work discipline and employee employee motivation on employee performance through the mediating role of employee satisfaction were both smaller than their direct influences.

Keywords: Work discipline, employee employee motivation, employee satisfaction, employee performance.

INTRODUCTION

Human resources are ones of the most important factors in achieving organizational goals for a government agency. Therefore, organizations should develop their human resources in order to be able to meet the demands of the organization. Since the success of an organization is determined by the performance of its employees, the Research and Development Department at the Ministry of Transportation of the Republic of Indonesia should pay attention on its employees.
From the interview with the Personnel Division Head and its Deputy of the Ministry of Transportation, it was known that, although the overall performance of its employees had been good, there were some areas still needed improvements. The last 3 (three) years employee performance data is presented in Figure 1 below.

![Employee Performance at the Ministry of Transportation- R&D Department](https://dinastipub.org/DIJMS)

**Figure 1. Employee Performance at the Ministry of Transportation- R&D Department**  
Source: Secondary Data (2019)

From the interview it was known that one of the factors affecting the employee performance at the R&D Department was the employee satisfaction. The employee satisfaction data for 3 (three) years showed decreasing (Figure 2).

![Employee Satisfaction at the Ministry of Transportation- R&D Department](https://dinastipub.org/DIJMS)

**Figure 2. Employee Satisfaction at the Ministry of Transportation- R&D Department**  
Source: Secondary Data (2019)

Based on the results of interviews with the Head and Deputy Head of Personnel at the R&D Department, two other main factors that caused employee performance were the employee work discipline and employee motivation.

**LITERATURE REVIEW**

**Work Discipline**

Wirawan in Bagaskara and Rahardja (2018) explained that discipline is an act and behavior of compliance with organizational regulations, work procedures, codes of ethics and
other organizational cultural norms that have to obeyed. Meanwhile according to Mangkunegara Bagaskara and Rahardja (2018) work discipline was defined as implementation of management to reinforce organizational guidelines. So it could be concluded that work discipline is an attitude that shows compliance and obedience in obeying all existing regulations in company which applied to support the company and its efforts to achieve goals.

**Employee motivation**

Based on Gibson in Abdurrahman, et. al. (2018) said that employee motivation as an impulse arises in or within from an individual who drives and lead the behavior. Meanwhile according to Rivai in Abdurrahman, et. al. (2018) explains that employee motivation is a set of attitudes and values which could influence individuals to achieve personal specific goals. And that's attitudes and values are something unseen which provides the power to encourage individuals to act like in achieving their goals.

**Employee Satisfaction**

According to Hasibuan in Putra and Lo (2020) which defining employee performance as the result of work achieved by person in carrying out a given task based on ability and experience at work. Meanwhile, according to Mangkunegara in Hamid and Riyanto (2020) Employee performance is the work of quality and quantity that achieved by an employee in carrying out their duties in accordance with the responsibilities which given to him. Furthermore Rivai and Sagala in Aima, et. al. (2017) defines employee performance as concrete actions from someone produces on work performance produced by employees according to their role in organization.

**Employee Performance**

According to Hasibuan in Putra and Lo (2020) which defining employee performance as the result of work achieved by person in carrying out a given task based on ability and experience at work. Meanwhile, according to Mangkunegara in Hamid and Riyanto (2020) Employee performance is the work of quality and quantity that achieved by an employee in carrying out their duties in accordance with the responsibilities which given to him. Furthermore Rivai and Sagala in Aima, et. al. (2017) defines employee performance as concrete actions from someone produces on work performance produced by employees according to their role in organization.

**Prior Research**

Research whom conducted by Bagaskara and Rahardja (2018), Hamid and Riyanto (2020) shows that work discipline has positive and also strong impact against employee performance. While research from Filliantoni, et. al. (2019) found that work discipline did not have an influence towards employee performance. Afianto and Utami (2017) stated that work discipline has strong influence over employee satisfaction. While Mamik, et. al. (2017) found different things, he found that work discipline had no influence against employee satisfaction.
The results of research conducted by Aima, et. al. (2017) shows that employee motivation has positive and strong impact over employee performance. But Anwar, et. al. (2019) found that employee motivation had no effect towards employee performance. Abdurrahman, et. al. (2018) states that employee motivation directly has positive and strongly react towards employee satisfaction. While research Mamik, et. al. (2017) states the opposite, he found that employee motivation has no influence on employee satisfaction.

Research Eliyana, et. al. (2019) found that employee satisfaction has positive and strong react against employee performance. Megadinanta (2017) found different things, they stated that employee satisfaction has no influence at all. Filliantoni, et. al. (2019), found that employee satisfaction has perfectly mediated those influence came from work discipline towards employee performance. However, research that conducted by Afianto and Utami (2017) found that employee satisfaction could only able to mediate those reaction over work discipline to employee performance partially. Hanafi and Yohana (2017) found that employee satisfaction could perfectly mediate those influence from employee motivation to employee performance. But research whom conducted by Abdurrahman, et. al. (2018), also Megadinanta (2017) found that employee satisfaction just could mediate those influence from employee motivation to employee performance partially.

Conceptual Framework

Based on the theoretical study from the previous research, that author proposed the following conceptual framework for this research (Figure 3).

Hypothesis

According to literature review and those theoretical framework which described above, the following of research hypothesis could be formulated as its follows: 1) Work discipline has strong reactions over employee performance at Research and Development department on Ministry of Transportation Republic of Indonesia, 2) Work discipline has strong impact towards employee satisfaction at research and Development department on Ministry of Transportation Republic of Indonesia, 3) Employee motivation has strong influence over employee performance at Research and Development department on Ministry of Transportation Republic of Indonesia, 4) Employee motivation has significant
influence against employee satisfaction at Research and Development department on Ministry of Transportation Republic of Indonesia, 5) Employee satisfaction has significant influence over employee performance at Ministry of Transportation's Research and Development department 6) Employee satisfaction could mediated those influence of work discipline against employee performance at Ministry of Transportation's Research and Development department and 7) Employee satisfaction could mediates those impact from employee motivation to employee performance at Research and Development department on Ministry of Transportation the Republic of Indonesia.

RESEARCH METHODS

The research was design used analysis of causality (cause and effect) such as analyzing the causality relationship between research variables in accordance with the hypothesis compiled. This research type was chosen considering the purpose of researcher to explain those connection and influences that occur between variables.

The independent variables in this research was consisted of Work Discipline (X1), Employee Employee motivation (X2), while the dependent variables were Employee Satisfaction (Y1) and Employee Performance (Y2). The subjects of this research were employees at Ministry of Transportation's Training and Development Department.

Population in this research were all employees from Research and Development Agency at Ministry of Transportation Republic of Indonesia, which totaling numbered of 160 (one hundred and sixty) people. Samples filtered obtained were 115 people (Slovin, 5% error tolerance). As for the sampling technique it used Probability Sampling with a simple random sampling design.

This current research used data analysis techniques by SmartPLS version 3.0 software which run on computer media. PLS (Partial Least Square) is a variance-based structural equation analysis (SEM) which could simultaneously test measurement models along with structural model test. The measurement model used to test the validity and reliability, while structural model used to examine causality (hypothesis test with predictive models).

FINDINGS AND DISCUSSION

Outer Model Test

Assessment over convergent validity by checking personal item reliability that could described from those standardized loading factor value. The standardized loading factor illustrates the amount of correlation between each measurement item (indicator) and its construct. The loading factor value is > 0.5 so if the loading factor value is <0.5, then the indicators will be erased from selected model.

Based on the convergent validity analysis using SmartPLS version 3.2.8, the loading factors range for the indicators for work discipline, employee employee motivation, employee satisfaction, and employee performance were 0.703 to 0.937; therefore, they were valid ( > 0.500).

Both the Alpha Cronbach coefficients and the Composite reliability for work discipline, employee employee motivation, employee satisfaction and employee performance range were 0.939 to 0.970; therefore, they were reliable ( > 0.700).
**Inner Model Test**

To evaluate path coefficient, by SmartPLS bootstrapping had the following results:

**Table 1. Path Coefficient value and P-Values (Direct and Indirect Influences)**

<table>
<thead>
<tr>
<th>Relationship Between Constructions</th>
<th>Original Sample (O)</th>
<th>Sample Mean (M)</th>
<th>Standard Deviation (STDEV)</th>
<th>T Statistics (O/STDEV)</th>
<th>P Values</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Influence</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work discipline -&gt; Employee</td>
<td>0.203</td>
<td>0.208</td>
<td>0.089</td>
<td>2.274</td>
<td>0.023</td>
<td>Significant and positive</td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work discipline -&gt; Employee</td>
<td>0.355</td>
<td>0.358</td>
<td>0.084</td>
<td>4.204</td>
<td>0.000</td>
<td>Significant and positive</td>
</tr>
<tr>
<td>satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee motivation -&gt; Employee</td>
<td>0.311</td>
<td>0.302</td>
<td>0.121</td>
<td>2.569</td>
<td>0.010</td>
<td>Significant and positive</td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee motivation -&gt; Employee</td>
<td>0.612</td>
<td>0.609</td>
<td>0.084</td>
<td>7.321</td>
<td>0.000</td>
<td>Significant and positive</td>
</tr>
<tr>
<td>satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee satisfaction -&gt; Employee</td>
<td>0.453</td>
<td>0.459</td>
<td>0.097</td>
<td>4.682</td>
<td>0.000</td>
<td>Significant and positive</td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Indirect Influence</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work discipline -&gt; Employee</td>
<td>0.161</td>
<td>0.164</td>
<td>0.049</td>
<td>3.285</td>
<td>0.001</td>
<td>Significant and positive</td>
</tr>
<tr>
<td>satisfaction -&gt; Employee performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee motivation -&gt; Employee</td>
<td>0.277</td>
<td>0.281</td>
<td>0.076</td>
<td>3.651</td>
<td>0.000</td>
<td>Significant and positive</td>
</tr>
<tr>
<td>satisfaction -&gt; Employee performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results from Table 1 showed that: the work discipline had significant and positive influence on both employee performance and employee satisfaction; employee employee motivation had significant and positive influence on both employee performance and employee satisfaction. However, the path analysis results showed that the indirect influences of work discipline and employee employee motivation on employee performance through the mediating role of employee satisfaction were both smaller than their direct influences.

**R² Evaluation, F Statistic Test, and Goodness of Fit Index (GoF)**

To assess these worthy of R² according to estimation results by calculate SmartPLS version 3.2.8 algorithm, the results of R² value are 0.891 for the variable employee satisfaction and 0.886 for employee performance variables. The value of R² indicates the level of persistence over exogenous variables (work discipline and employee motivation) towards the endogenous could be said quite high.

1) \[ R^2 = 0.891 \text{ (Employee Satisfaction)} \]

\[
F_{hitung} = \frac{R^2}{(k-1)} = \frac{0.891}{(3-1)} = 0.445 \\
F_{hitung} = \frac{1-R^2/(n-k)}{1-0.891/(115-3)} = 0.0009 = 457.5
\]
2) $R^2 = 0.886$ (Employee Performance)

$$F_{hitung} = \frac{R^2}{(k-1)} = \frac{0.886}{4-1} = \frac{0.295}{0.001} = 288.76$$

From the results above it could be seen that the Fcount value of 1 in this research was 457.5 so its proven that variables of work discipline and employee motivation together has positive and significant influence over employee satisfaction. While the Fcounted value of 2 was 288.76, so these variables of work discipline, employee motivation, employee satisfaction together had positive and strong impact against employee performance.

Validation of the combined performance from outer model and inner model obtained through GoF as follows:

$$GoF = \sqrt{\text{AVE} \times R^2} = \sqrt{0.663 \times 0.589} = 0.767$$

According to these outcomes it could be said that these mixed achievement as a whole was good because the Goodness of Fit Index (GoF) value is more than 0.36 (large scale GoF).

**Analysis of Inner Loading Model**

Correlation analysis is a statistical analysis that could measures the level of relationship involving more than one independent variable ($X_1$, and $X_2$) and the dependent variable ($Y_1$, and $Y_2$).

![Figure 5. Inner Loading Model](image-url)
The results from Figure 5 showed that: The highest inner loading value in work discipline variable was shown on indicator X1.7 which explains regarding employees who always maintain attitudes and behavior in work place. The highest inner loading value on work motivation variable was shown on indicator X2.6 which explains about safety and health standards in work environment. The highest inner loading value on employee satisfaction was shown on indicator Y1.1 that describes about employees who were satisfy in carrying out their duties and obligations. also the highest inner loading value in employee performance variable was shown by indicator Y2.5 which explains regarding employees who could be responsible for their tasks result which they've been done.

Discussion

Work discipline had significant and positive influence on employee performance. These results were in line with previous research which done by Bagaskara and Rahardja (2018), Hamid and Riyanto (2020) which show that discipline has positive and strong reaction towards employee Achievement. If related to inner loading model, the statement "I always try to maintain attitudes and behavior during work" has the highest value compared to other outer loading values which exist in work discipline variable. Its describe that employees who can maintain attitudes and behavior in working in company environment will produce a very good quality of work so the employee performance will continue to increase along with increased quality of work produced by these employees.

Work discipline had significant and positive influence on employee satisfaction. These results were in line with previous research whom conducted by Afianto and Utami (2017) which said that work discipline has strongly reaction towards employee satisfaction. When associated with outer loading value, it appears that the statement "I am resting in accordance with the specified time" and "I am trying to come to work earlier than the specified time" is a statement that has the second and third largest outer loading values respectively. This could describe that employees should pay more attention to applied time that rules at these department, because the time rules that have been set by department has very positive implications for the work given to the employees themselves, so if employees obey the rules in organization will have regularity in carrying out their duties and assuming responsibility for their work, so employees will achieve maximum satisfaction at work.

Employee motivation had significant and positive influence on employee performance. These results were consistent with prior research which conducted by Aima, et. al. (2017) which shows that employee motivation has positive and strong reaction over employee performance. If its connected with outer loading value, the statement "department has implemented standards of good occupational safety and health". This shows that if the needs of someone's security have been fulfilled, then their employee motivation for work will increase, so they will continue to develop their ability to provide the best work results, so the quality and quantity of work continues to increase and able to do with the tasks that they received on time.

Employee motivation had significant and positive influence on employee satisfaction. Those outcomes were consistent with previous research which done by Abdurrahman, et. al. (2018) which said that employee motivation directly has positive and strong influence over employee satisfaction. If related to outer loading value, the statement
"Department has provided good education and training programs for employees". This means that the education and training programs in department are good enough, but the education and training program must be evaluated continuously, so the program is right on target and is useful to support employees in carrying out their duties. With an appropriate education and training program, employees got simple way to understand the tasks and functions of work within these department so they will be satisfied with the work that they are getting.

Employee satisfaction had significant and positive influence on employees performance. That outcomes has similair statement with previous research which conducted by Eliyana, et al. (2019)which found that employee satisfaction had positive and remarkable reaction towards employee performance. If related to outer loading value, the statement "I am happy to go through my work and the responsibility assigned to me" has the highest outer loading value compared to other outer loading values. This shows that the employees feels happy about work that they doing with those responsibility. However, this department still have to monitor the work done and should provide tasks in accordance with responsibilities which they carry without assigning tasks outside their responsibilities. By assigning tasks that accordance with their responsibilities, employees will do it seriously because they are happy with work that they are doing, so their performance will also increase.

The path analysis results showed that the indirect influences of work discipline on employee performance through the mediating role of employee satisfaction were both smaller than their direct influences. These results were in line with prior research which conducted Afianto and Utami (2017) found that employee satisfaction is only able to partially mediate these effect from work discipline to employee performance. This accordance with conditions in field where employees who have good employee satisfaction will produce more maximum performance compared to other employees who have low employee satisfaction even with the same level of work discipline and employee satisfaction.

The path analysis results showed that the indirect influences of employee motivation on employee performance through the mediating role of employee satisfaction were both smaller than their direct influences. This in line with research that conducted by Abdurrahman, et. al. (2018) and Megadinanta (2017) who found that employee satisfaction was only able to mediate these effect of employee motivation to employee performance partially. This accordance with existing conditions in the field, employees who have high work employee motivation will continue to improve their performance in order to get work recognition from their superiors. With recognition of work, employees will be more eager to do their jobs, so they will release their best potential and will have an impact on their work performance and productivity.

CONCLUSION AND SUGGESTION
Conclusion

Based on the results above several conclusions can be stated as follows:
1) Work discipline has significant and positive influence on employee performance at The Ministry of Transportation - Research and Development Department.
2) Work discipline has significant and positive influence on employee satisfaction at The Ministry of Transportation - Research and Development Department.
3) Employee motivation has significant and positive influence on employee performance at The Ministry of Transportation - Research and Development Department.
4) Employee motivation has significant and positive influence on employee satisfaction at The Ministry of Transportation - Research and Development Department.

5) Employee satisfaction has significant and positive influence on employee performance at The Ministry of Transportation - Research and Development Department.

6) Employee satisfaction has a mediating role on the influence of employees work discipline on employee performance at Ministry of Transportation - Research and Development Department.

7) Employee satisfaction has a mediating role on the influence of employees motivation on employee performance at Ministry of Transportation - Research and Development Department.

However, from the path analyses results, they showed that the direct influences of both employee work discipline and motivation on employee performance were higher than the indirect influences. Therefore, the employee satisfaction did not the mediating role on employee performance at Ministry of Transportation Research and Development Department.

Suggestion

Based on the research results, some suggestions were given as its follows:

1) Department leaders need to emphasize to supervisors to remind their subordinates to always keep good attitudes and behavior in the workplace, so that the subordinates’ performance will improve.

2) Department leaders need to emphasize to supervisors to remind their subordinates to always pay attention to rules and regulations in the workplace, so the department has the uniformity in carrying out the duties and responsibilities, therefore the subordinates’ performance will increase.

REFERENCES


